AMENDMENTS TO THE CLAIMS

1. (Currently amended) Diagnostic agent comprising a compound of formula:

(PEPTIDE)n1 – (LINKER)n2 – (SIGNAL)n3 (I)

wherein

1) PEPTIDE is chosen [[in]] from the group:

a) X1 – X2 – X3 – X4 - NHOH (II),

wherein

X1 is absent or X1 is a residue of an alpha-amino glycine, X2 is a residue of an amino acid selected from proline, hydroxyproline, thioproline and alanine, X3 is a residue of an amino acid selected from glutamine, glutamic acid, leucine, isoleucine and phenylalanine and X4 is a residue of an alpha-amino acid selected from glycine, alanine, valine, leucine ;

and the hydrogen atom of the amino group in said alpha-amino acid X1 may be replaced with a member X0 selected from the group consisting of acetyl, benzoyl (Bz), benzyloxy, t-butyloxycarbonyl, benzyloxycarbonyl (Z), p-aminobenzoyl (ABz), p-amino-benzyl, p-hydroxybenzoyl (HBz), 3-p-hydroxyphenylpropionyl (HPP); [[.]]

~~b) a peptide functionally equivalent to a peptide of a)~~

~~c) a peptidic fragment of (II) functionally equivalent to a peptide of a) or b)~~

2) SIGNAL is a signal entity for medical imaging; and

3) LINKER eventually absent represents a chemical link between PEPTIDE and SIGNAL; and the pharmaceutical salts thereof.

2. (Original) Diagnostic agent of claim 1 wherein X1 is absent or X1 is glycine, X2 is a residue of an amino acid selected from proline, hydroxyproline, thioproline, X3 is a residue of an amino acid selected from leucine, isoleucine and phenylalanine and X4 is a residue of an alpha-amino acid selected from glycine, alanine.

3. (Currently amended) Diagnostic agent of claim 1 wherein PEPTIDE is X-NHOH with X chosen ~~among~~ from the group: Abz-Gly-Pro-D-Leu-D-Ala, HBz-Gly-Pro-D-Leu-D-Ala, Abz-Gly-Pro-Leu-Ala, Bz-Gly-Pro-D-Leu-D-Ala, Bz-Gly-Pro-Leu-Ala, HPP-Pro-D-Leu-D-Ala, HPP-Pro-Leu-Ala, Z-Pro-D-Leu-D-Ala, and Z-Pro-Leu-Ala.

4. (Previously presented) Diagnostic agent of claim 1 wherein PEPTIDE is p-aminobenzoyl-Gly-Pro-D-Leu-D-Ala-NHOH.

5. (Currently amended) Diagnostic agent of claim 1 wherein SIGNAL is macrocyclic or linear chelate chosen ~~among~~ from the group: DTPA, DOTA, DTPA BMA, BOPTA, DO3A, HPDO3A, TETA, TRITA, HETA, M4DOTA, DOTMA, MCTA, PCTA and the derivatives thereof.

6. (Currently amended) Diagnostic agent of claim 1 wherein SIGNAL is a lipidic ~~nanoparticule~~ nanoparticle, a liposome, or a nanocapsule, and wherein the SIGNAL is a carrier of a diagnostic metal chelate.

7. (Currently amended) Diagnostic agent of claim 1 wherein said agent is coupled to a metal element M chosen ~~among~~ from the group of ions ~~an ion~~ of a paramagnetic metal of atomic number 21-29, 42-44, or 58-70, or a radionucleide.

8. (Previously presented) Diagnostic agent of claim 1 wherein SIGNAL is an iron oxide particle.

9. (Original) Diagnostic agent of claim 8 wherein the particle is coated with a gem-bisphosphonate.

10.-11. (Cancelled)

12. (Previously presented) Method of preparation of a compound of claim 1 comprising the coupling of a peptide X1 -X2 -X3 -X4-NHOH and a SIGNAL entity.

13. (Previously presented) Method of detecting, imaging or monitoring the presence of matrix metalloproteinase in a patient comprising the steps of: a) administering to said patient a diagnostic agent of claim 1; and b) acquiring an image of a site of concentration of said diagnostic agent in the patient by a diagnostic imaging technique.

14. (Currently amended) Method of detecting, imaging or monitoring a pathological disorder associated with matrix metalloproteinase activity in a patient comprising the steps of: a) administering to said patient a diagnostic agent according to claim 1; and [[c)]] b) acquiring an

image of a site of concentration of said diagnostic agent in the patient by a diagnostic imaging technique.

15. (Currently amended) Method according to claim 14, wherein the pathological disorder associated with matrix metalloproteinase activity in a patient ~~atherosclerosis~~ is coronary ~~coronory~~ atherosclerosis or cerebrovascular atherosclerosis.

16. (Previously presented) Method of identifying a patient at high risk for transient cerebral ischemic attacks or stroke by determining the degree of active atherosclerosis in a patient comprising carrying out the method of claim 15.

17. (Previously presented) Method of identifying a patient at high risk for acute cardiac ischemia, myocardial infarction or cardiac death by determining the degree of active atherosclerosis by imaging the patient by the method of claim 15.

18. (Currently amended) Method of ~~diagnostic of~~ diagnosing a cardiovascular/atheroma disease comprising the administration of an effective amount of the diagnostic agent according to claim 1 to a patient in need thereof.

19. (Previously presented) Method of imaging cardiovascular pathologies associated with extracellular matrix degradation, such as atherosclerosis, heart failure, and restenosis in a patient involving: (1) administering a paramagnetic metallopharmaceutical diagnostic agent of claim 1

capable of localizing the loci of the cardiovascular pathology to a patient by injection or infusion; and (2) imaging the patient using magnetic resonance imaging or planar CT or SPECT gamma scintigraphy, or positron emission tomography or sonography.

20. (Currently amended) Method for assessing vulnerable plaques which comprises combining a diagnostic imaging with a diagnostic agent of claim 1 and/or a morphologic analysis of the plaques and/or a study of stenoses.